

1 **(BSP September 27, 2004)**

2 **Disc Bearing**

3 Unless other materials are specified in the Plans, disc bearing assembly components
4 shall conform to the following requirements for those components shown and specified
5 in the Plans:
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7 **Steel Plates and Bars**

8 Steel plates and bars (sliding plates, bearing plates, guide bars, masonry plates,
9 and sole plates) shall conform to ASTM A 36M, and the dimensions shall comply
10 with the details as shown in the Plans. The surface of the steel plates and bars in
11 contact with stainless steel shall have an average surface roughness of 3.175
12 micrometers or less. The surface of steel plates in contact with the polyether
13 urethane disc, and the surface within the recess of steel plates and bars retaining
14 PTFE, shall have an average surface roughness of 6.35 micrometers or less. All
15 other steel plate and bar surfaces in contact with other disc bearing assembly
16 components shall have an average surface roughness of 12.70 micrometers or
17 less.
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19 **Polyether Urethane**

20 Polyether urethane shall conform to Section 18.3.2.8 and Table 18.3.2.8-1 of the
21 AASHTO LRFD Bridge Construction Specifications, 1st Edition and latest interims.
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23 **Polytetrafluoroethylene (PTFE)**

24 PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE
25 conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction
26 Specifications, 1st Edition and latest interims.
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28 **Stainless Steel**

29 Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in
30 contact with PTFE shall be polished to a Number 8 mirror finish.
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32 Stainless steel countersunk screws shall be hexagon socket type conforming to
33 ANSI B 18.3 and shall conform to ASTM F 593 Type 304L.
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35 **Silicone Grease**

36 Silicone grease shall conform to Military Specification MIL-S-8660.
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38 **Bolts, Nuts and Washers**

39 Bolts, nuts and washers shall conform to Section 9-06.5(3).
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41 **Anchor Bolt Assembly**

42 Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental
43 requirements S2, S3, and S5. Nuts shall conform to AASHTO M 291M Class 12.
44 Washers shall conform to AASHTO M 293M. Bars shall conform to ASTM A 36M.
45 Pipe shall conform to ASTM A 53 Grade B Type E or S, black.
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47 **Resin Filler**

48 Resin filler shall conform to Section 6-02.2 as supplemented in these Special
49 Provisions.
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Submittals of Acceptance Test Reports and Certificates

The Contractor shall submit the following production samples, and test reports and certificates, to the Engineer for review, testing, and approval:

1. Manufacturer's certificate of compliance for the polyether urethane, PTFE, resin filler, and silicone grease, in accordance with Section 1-06.3.
2. A 50 millimeter by 75 millimeter by 3.18 millimeter sample of PTFE taken from the lot of production material.
3. Certified mill test reports for all steel and stainless steel materials incorporated in the bearings.

The Contractor shall not ship the bearings from the fabricator's facility until receiving the Engineer's written approval of all production samples, and test reports and certificates.